

REMARKS

Claims 1, 2 and 11-26 are all the claims pending in the application.

I. **Claim Rejections under 35 U.S.C. § 103(a)**

A. Claims 1 and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tetsuya et al. (JP 2002-026899) in view of Cho (KR 2003-005604).

Claim 1, as amended, is drawn to a master communication device comprising a receiving section for receiving, from a slave communication device, an authentication request including device information, and for monitoring and determining whether or not the authentication request is changed by an unspecified third party while being transmitted; a display section for, when it is determined that the authentication request is not changed, displaying the device information included in the authentication request on a screen thereof; and an input section for receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the slave communication device which is a source of the authentication request determined not to be changed.

In other words, according to claim 1, a determination is made as to whether or not the authentication request from the slave communication device has been changed by a third party, and when it is determined that the authentication request has not been changed, the device information included in the authentication request is displayed on a display section, whereby a user of the master communication device is then able to make a determination, based on the displayed device information, as to whether or not to verify the authentication with the slave.

communication device. Thus, in claim 1, the determination as to whether or not the authentication request has been changed by a third party is different from the determination made by the user as to whether or not to verify the authentication with the slave communication device.

Taking the foregoing into account, Applicants respectfully submit that the combination of Tetsuya and Cho does not teach, suggest or otherwise render obvious the above-noted features recited in amended claim 1.

In particular, regarding Tetsuya, Applicants note that this reference discloses a verification system that is able verify the integrity of data that is wirelessly transmitted between a transmission Source A and a transmission Destination B (see Abstract). In this regard, as disclosed in Tetsuya, the Source A generates verification data X_p , and the Destination B generates verification data X_x (see Abstract; and sections (a) and (b) of paragraph [0036]). As explained in Tetsuya, the user is then able verify the integrity of the data by making a determination as to whether the verification data X_p (generated by Source A) and the verification data X_x (generated by Destination B) are the same (i.e., whether $X_p=X_x$) (see Abstract; and section (c) of paragraph [0036]).

Based on the foregoing description of Tetsuya, Applicants note that while Tetsuya discloses the ability to verify the integrity of data transmitted between Source A and Destination B by comparing the verification data from both of the communication devices (i.e., the verification data X_p from Source A and the verification data X_x from Destination B), that Tetsuya does not disclose or suggest that when it is determined that an authentication request from a slave device to a master device has not been changed, that the device information

included in the authentication request is displayed on a display section, whereby a user of the master communication device is then able to make a determination, based on the displayed device information, as to whether or not to verify the authentication with the slave communication device.

In particular, Applicants respectfully submit that Tetsuya does not disclose, suggest or otherwise render obvious the above-noted features recited in amended claim 1 which indicate that a master communication device comprises a receiving section for receiving, from a slave communication device, an authentication request including device information, and for monitoring and determining whether or not the authentication request is changed by an unspecified third party while being transmitted; a display section for, when it is determined that the authentication request is not changed, displaying the device information included in the authentication request on a screen thereof; and an input section for receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the slave communication device which is a source of the authentication request determined not to be changed.

In addition, Applicants respectfully submit that Cho does not cure the above-noted deficiencies of Tetsuya. Accordingly, Applicants respectfully submit that amended claim 1 is patentable over the cited prior art, an indication of which is kindly requested. Claim 15 depends from claim 1 and is therefore considered patentable at least by virtue of its dependency.

Regarding claim 11, Applicants note that this claim has been amended so as to recite the features of a display section for, when it is determined that the authentication request is not

changed, displaying the device information included in the authentication request on a screen thereof; and an input section for receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the slave communication device which is a source of the authentication request determined not to be changed.

For at least similar reasons as discussed above with respect to claim 1, Applicants respectfully submit that Tetsuya and Cho do not teach, suggest or otherwise render obvious such features. Accordingly, Applicants submit that claim 11 is patentable over the cited prior art, an indication of which is kindly requested. Claim 19 depends from claim 11 and is therefore considered patentable at least by virtue of its dependency.

Regarding claim 13, Applicants note that this claim has been amended so as to recite the features of the master communication device displaying the device information included in the authentication request on a screen thereof when it is determined that the authentication request is not changed; and the master communication device receiving, from a user, an input of a determination result obtained based on the displayed information, by allowing the user to determine whether or not to verify the authentication with the slave communication device which is a source of the authentication request determined not to be changed.

For at least similar reasons as discussed above with respect to claim 1, Applicants respectfully submit that Tetsuya and Cho do not teach, suggest or otherwise render obvious such features. Accordingly, Applicants submit that claim 13 is patentable over the cited prior art, an indication of which is kindly requested. Claim 23 depends from claim 13 and is therefore

considered patentable at least by virtue of its dependency.

B. Claims 2 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kang et al. (US 7,096,352) in view of Kimura (US 2001/0048744).

Claim 2, as amended, is drawn to a slave communication device comprising a display section for, when it is determined that the authentication response is not changed, displaying the device information included in the authentication response on a screen thereof; and an input section for receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the master communication device which is a source of the authentication response determined not to be changed.

In other words, according to claim 2, a determination is made as to whether or not the authentication response from the master communication device has been changed by a third party, and when it is determined that the authentication response has not been changed, the device information included in the authentication response is displayed on a display section, whereby a user of the slave communication device is then able to make a determination, based on the displayed device information, as to whether or not to verify the authentication with the master communication device.

Taking the foregoing into account, Applicants respectfully submit that the combination of Kang and Kimura does not teach, suggest or otherwise render obvious the above-noted features recited in amended claim 2.

First, with respect to Kimura, Applicants note that this reference discloses an

authentication procedure that takes place between an access point device and a mobile station (see Fig. 2). In this regard, as explained in Kimura, this procedure starts with mobile station MT1 sending an authentication request message 1 to the access point device 18 for initiating authentication (see paragraph [0038]). As disclosed in Kimura, upon receiving the authentication request message, the authentication request displays means 16 of the access point device 18 displays thereon the identity of the mobile station making the authentication request (see paragraphs [0042] and [0056]).

After the identity of the mobile station making the authentication request is displayed at the access point device 18, the network administrator determines whether or not to authenticate the requesting mobile station (see paragraph [0043]). In this regard, as explained in Kimura, if the network administrator determines to authenticate the requesting mobile device, then an authentication response message is sent from the access point device 18 to the requesting mobile station (see paragraph [0043]).

Based on the foregoing description, Applicants note that in Kimura, the display device is located at the access point device 18, with the access point device 18 being the device that transmits an authentication response message to the mobile station in response to an authentication request message transmitted from the mobile station.

In direct contrast to the above-noted configuration of Kimura, in which the device that transmits the authentication response message (i.e., the access point device 18) includes the display section, Applicants note that according to amended claim 2, it is the slave device (i.e., the device which transmits an authentication request message) that includes the display section.

In addition, in contrast to Kimura, Applicants note that according to amended claim 2, it is the slave device (i.e., the device which transmits an authentication request message) that includes the input section for receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the master communication device which is a source of the authentication response determined not to be changed.

In view of the foregoing, Applicants respectfully submit that Kimura does not disclose, suggest or otherwise render obvious the above-noted features recited in amended claim 2 which indicate that the slave communication device comprises a display section for, when it is determined that the authentication response is not changed, displaying the device information included in the authentication response on a screen thereof; and an input section for receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the master communication device which is a source of the authentication response determined not to be changed.

Further, Applicants respectfully submit that Kang does not cure the above-noted deficiencies of Kimura. Accordingly, Applicants submit that claim 2 is patentable over the cited prior art, an indication of which is kindly requested.

In addition, Applicants note that claim 2 also indicates that the slave communication device includes an authentication section for executing processing of verifying or not verifying the authentication with the master communication device in accordance with the determination

result input to the input section, and for, when the determination result is indicative of verification of the authentication, further performing key exchange with the master communication device using the device information included in the authentication request and the authentication response. Applicants respectfully submit that Kang and Kimura also do not teach or suggest this feature recited in amended claim 2.

In particular, with respect to Kang, Applicants note that this reference discloses a handshake process which utilizes a shared secret value that is stored by a client and a server, respectively, wherein the shared secret value is preferably a pre-master secret (see col. 2, lines 60-63). In this regard, as explained in Kang, the handshake process involves the server generating a master secret based on the shared pre-master secret, and generating a key block based on the generated master secret (see col. 3, lines 29-33). Further, as explained in Kang, the last key value for use in encryption and decryption algorithms is generated from the key block (see col. 3, lines 43-45).

Based on the foregoing description, Applicants note that in Kang, in order to generate the key block, which is utilized to generate the last key value, it is necessary that the shared pre-master key be stored in advance.

In contrast, according to claim 2, Applicants note that because the key exchange between the communication devices is performed using the device information included in the authentication request and the information included in the authentication response, it is not necessary to store such information in advance.

In view of the foregoing, Applicants respectfully submit that Kang does not disclose,

suggest or otherwise render obvious the above-noted feature recited in amended claim 2 of an authentication section for executing processing of verifying or not verifying the authentication with the master communication device in accordance with the determination result input to the input section, and for, when the determination result is indicative of verification of the authentication, further performing key exchange with the master communication device using the device information included in the authentication request and the authentication response.

Further, Applicants respectfully submit that Kimura does not cure the above-noted deficiency of Kang. Accordingly, Applicants respectfully submit that amended claim 2 is patentable over the cited prior art, an indication of which is kindly requested. Claim 16 depends from claim 2 and is therefore considered patentable at least by virtue of its dependency.

Regarding claim 12, Applicants note that this claim has been amended so as to recite the features of a display section for, when it is determined that the authentication response is not changed, displaying the device information included in the authentication response on a screen thereof; an input section for receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the master communication device which is a source of the authentication response determined not to be changed; and an authentication section for executing processing of verifying or not verifying the authentication with the master communication device in accordance with the determination result input to the input section, and for, when the determination result is indicative of verification of the authentication, further performing key exchange with the master communication device using the device information

included in the authentication request and the authentication response.

For at least similar reasons as discussed above with respect to claim 2, Applicants respectfully submit that Kang and Kimura do not teach, suggest or otherwise render obvious such features. Accordingly, Applicants submit that claim 12 is patentable over the cited prior art, an indication of which is kindly requested. Claim 20 depends from claim 12 and is therefore considered patentable at least by virtue of its dependency.

Regarding claim 14, Applicants note that this claim has been amended so as to recite the features of the slave communication device displaying the device information included in the authentication response on a screen thereof when it is determined that the authentication response is not changed; the slave communication device receiving, from a user, an input of a determination result obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the master communication device which is a source of the authentication response determined not to be changed; and the slave communication device and the master communication device performing key exchange with each other using the device information included in the authentication request and the authentication response when the determination result is indicative of verification of the authentication.

For at least similar reasons as discussed above with respect to claim 2, Applicants respectfully submit that Kang and Kimura do not teach, suggest or otherwise render obvious such features. Accordingly, Applicants submit that claim 14 is patentable over the cited prior art, an indication of which is kindly requested. Claim 24 depends from claim 14 and is therefore considered patentable at least by virtue of its dependency.

C. Claim 17 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tetsuya et al. (JP 2002-026899) in view of Cho (KR 2003-005604), and further in view of Briscoe et al. (US 7,464,402).

Claim 17 depends from claim 1. Applicants submit that Briscoe fails to cure the deficiencies of Tetsuya and Cho, as discussed above, with respect to claim 1. Accordingly, Applicants submit that claim 17 is patentable at least by virtue of its dependency.

Regarding claims 21 and 25, Applicants note that these claims depend from claims 11 and 13, respectively. Applicants submit that Briscoe fails to cure the deficiencies of Tetsuya and Cho, as discussed above, with respect to claims 11 and 13. Accordingly, Applicants submit that claims 21 and 25 are patentable at least by virtue of their dependency.

D. Claim 18 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kang et al. (US 7,096,352) in view of Kimura (US 2001/0048744), and further in view of Briscoe et al. (US 7,464,402).

Claim 18 depends from claim 2. Applicants submit that Briscoe fails to cure the deficiencies of Kimura and Kim, as discussed above, with respect to claim 2. Accordingly, Applicants submit that claim 18 is patentable at least by virtue of its dependency.

Regarding claims 22 and 26, Applicants note that these claims depend from claims 12 and 14, respectively. Applicants submit that Briscoe fails to cure the deficiencies of Kang and Kimura, as discussed above, with respect to claims 12 and 14. Accordingly, Applicants submit that claims 22 and 26 are patentable at least by virtue of their dependency.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Yibo ZHANG et al.

*/Kenneth W. Fields/
By: 2009.06.09 16:52:14 -04'00'*
Kenneth W. Fields
Registration No. 52,430
Attorney for Applicants

KWF/krg
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
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